

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

5437PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/021817

International filing date (day/month/year)

28.11.2005

Priority date (day/month/year)

03.12.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

MURATA MANUFACTURING CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Date of completion of this opinion

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/021817

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ the translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rule 12.3(a) and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed
 - ☐ filed together with the international application in electronic form
 - ☐ furnished subsequently to this Authority for the purposes of search
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/021817

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: JP, 2003-178844, A (Mitsubishi Electric Corp.), 27 June, 2003 (27.06.03), line 40, column 4 to line 14, column 5, Fig. 2 (Family: none)</p> <p>Document 2: JP, 2004-47827, A (MEC Co., Ltd.), 12 February, 2004 (12.02.04), paragraph [0002] & US, 2004-0079791, A1</p> <p>Document 3: JP, 4-162460, A (Hitachi Cable, Ltd.), 05 June, 1992 (05.06.92), lines 10-14, column 4 (Family: none)</p> <p>Document 4: JP, 9-172124, A (Kobe Steel, Ltd.), 30 June, 1997 (30.06.97), lines 7-11, column 1 (Family: none)</p> <p>Document 5: JP, 3096377, U (Insato Entapuraizu Co., Ltd.), 12 September, 2003 (12.09.03), full text, Figs. 1, 2 (Family: none)</p> <p>Claims 1-5, 7, and 8</p> <p style="padding-left: 20px;">The subject matter of claim 1 does not appear to involve an inventive step in view of documents 1-5 cited in the ISR.</p> <p style="padding-left: 20px;">The electric contact part of document 1 cited in the ISR is also considered to comprise a pedestal section, consisting of a first and a second main surface and side surface, and a fitting section, wherein said pedestal section is joined to the surface of a surface-mounted board through solder, and wherein the fitting peripheral surface of the fitting section and the second main surface and the side surface of the pedestal section are electrically conductive. It is a commonly used art to form a metal film on the surface of a conductive part, and a person skilled in the art could have, as required, formed a metal film on the fitting peripheral surface of the fitting section and on the second main surface and the side surface of the pedestal section. It is a commonly used art to form a metal film having Au as the main component on a metal film having Ni as the main component or to make Co contained in the material for the metal film having Ni as the main component (refer, for example, to documents 2-4 cited in the ISR). Besides, it is a mere matter of design variation a person skilled in the art could have determined as required whether or not to select the constitution including the second metal film having Au as the main component which is formed on the first metal film containing Co with Ni as the main component. Furthermore, coaxial connectors are well known (refer to document 5 cited in the ISR for examples.)</p> <p>Claim 6</p> <p style="padding-left: 20px;">The subject matter of claim 6 does not appear to involve an inventive step in view of documents 1-5 cited in the ISR.</p>			

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/021817

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

It is a commonly used art to make different metal members into one body by cladding. Besides, it is a mere matter of design variation a person skilled in the art could have done as required to form the first metal film by cladding.

Claim 9

The subject matter of claim 9 does not appear to involve an inventive step in view of documents 1-5 cited in the ISR.

It is a commonly used art to mount an electric contact part on a wiring board by soldering. Besides, it is also a commonly used art to apply a solder which has Sn as the main component. Furthermore, a person skilled in the art could have as required selected the pedestal section as the part to be soldered.

Claim 10

The subject matter of claim 10 does not appear to involve an inventive step in view of documents 1-5 cited in the ISR.

An Sn-Ag type solder which is lead-free and has Sn as the main component is commonly used.